FIG.1

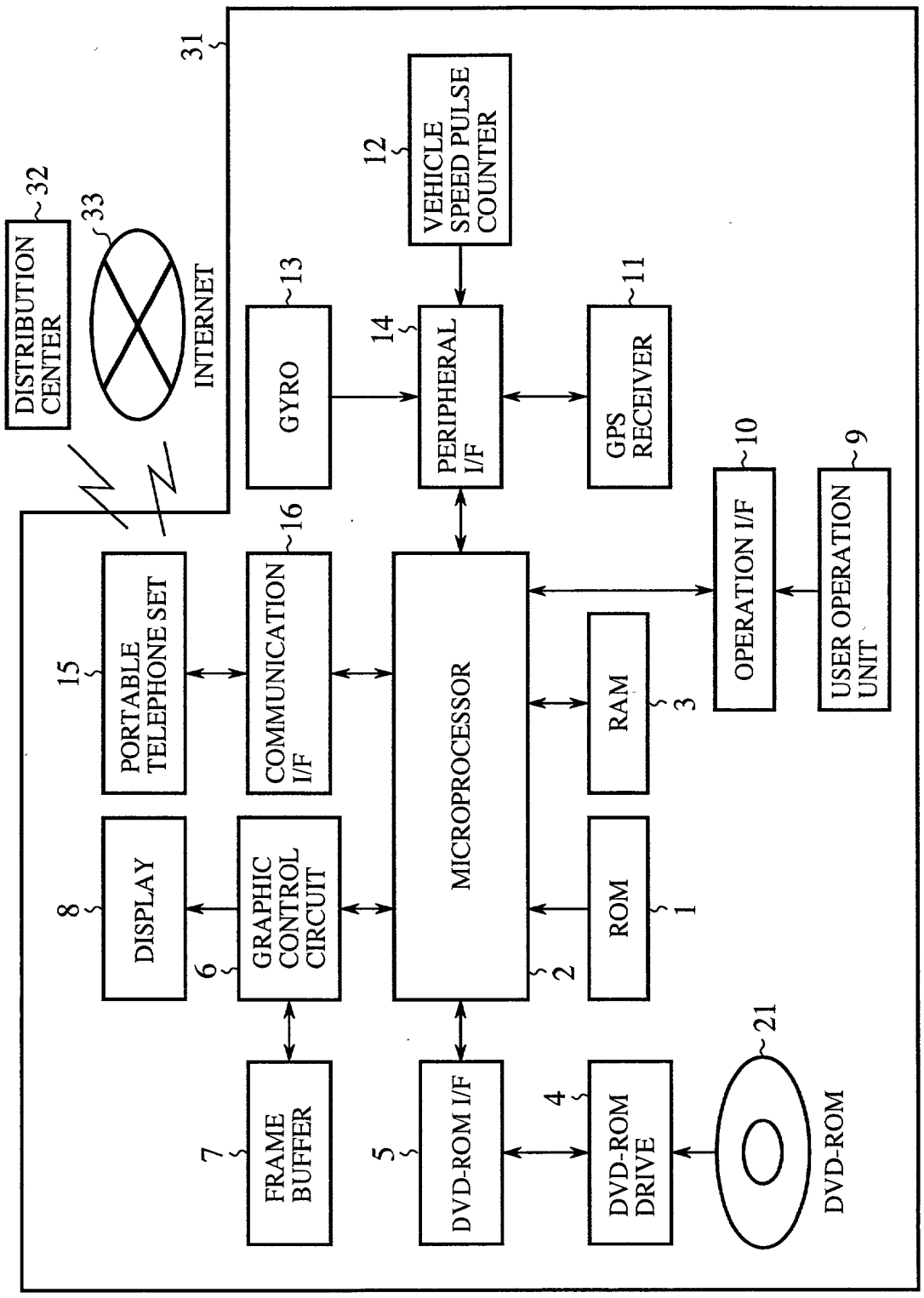
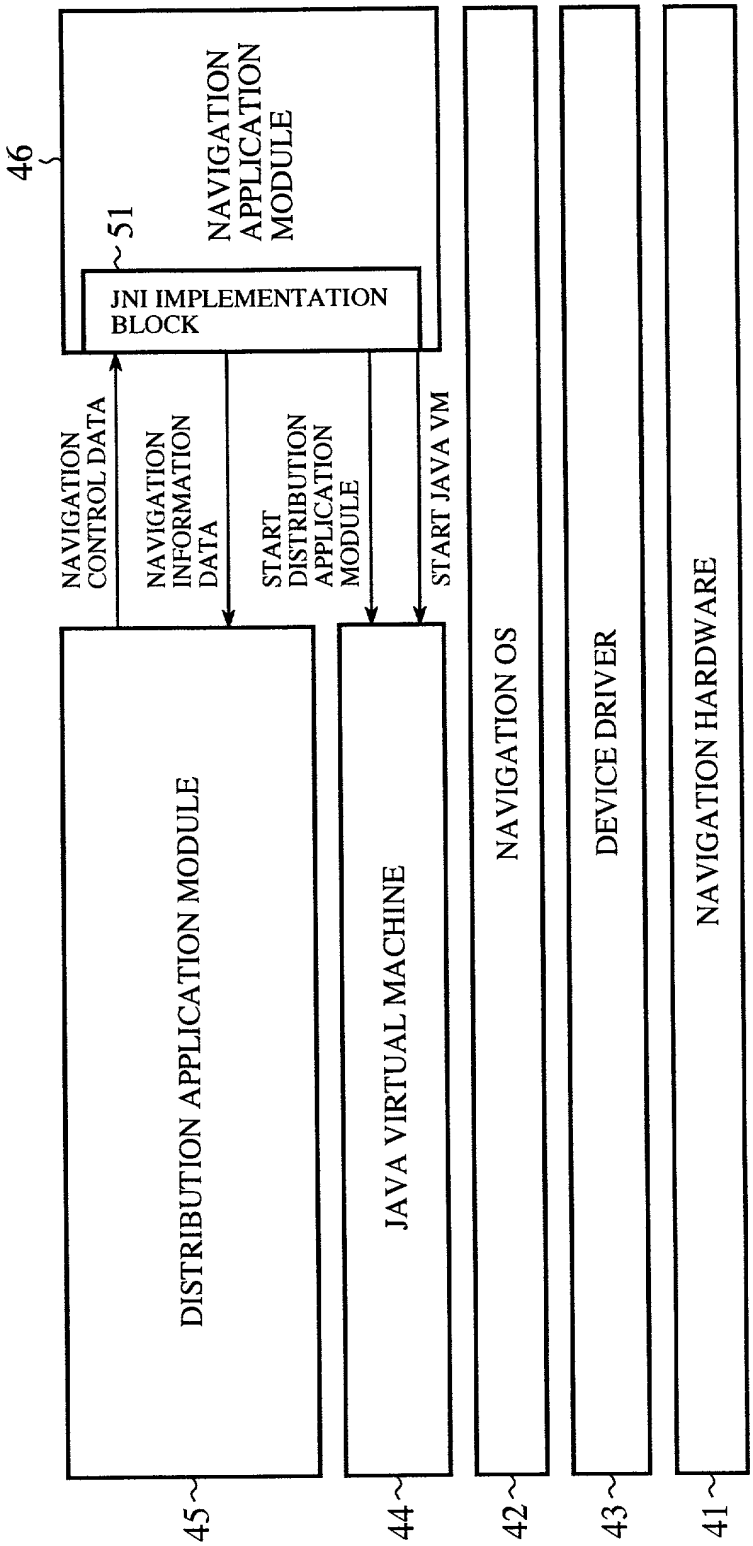

31
DISTRIBUTION CENTER
32
33
INTERNET
12
VEHICLE SPEED PULSE COUNTER
13
GYRO
14
PERIPHERAL I/F
11
GPS RECEIVER
10
OPERATION I/F
9
USER OPERATION UNIT
15
PORTABLE TELEPHONE SET
16
COMMUNICATION I/F
MICROPROCESSOR
RAM
3
8
DISPLAY
6
GRAPHIC CONTROL CIRCUIT
2
ROM
1
7
FRAME BUFFER
5
DVD-ROM I/F
4
DVD-ROM DRIVE
21
DVD-ROM

FIG.2


46
NAVIGATION APPLICATION MODULE
51
JNI IMPLEMENTATION BLOCK
NAVIGATION CONTROL DATA
NAVIGATION INFORMATION DATA
START DISTRIBUTION APPLICATION MODULE
START JAVA VM
DISTRIBUTION APPLICATION MODULE
JAVA VIRTUAL MACHINE
NAVIGATION OS
DEVICE DRIVER
NAVIGATION HARDWARE
45
44
42
43
41

TOKTO' 6EHH9760

FIG.3

VEHICLE OPERATION INSTRUCTION

VEHICLE INFORMATION

VEHICLE ID: VO1 (VEHICLE FOR DELIVERY 1)
DRIVER: SUZUKI ICHIRO
DATE AND TIME OF DELIVERY: '99-3-31
DISTRICT OF DELIVERY: HYOGO-KEN AMAGASAKI-SHI
NUMBER OF DESTINATIONS OF DELIVERY: FIVE
DELIVERED WEIGHT: 2t

ORDER OF DELIVERY AND LOCATIONS OF DESTINATIONS OF DELIVERY

(ORDER OF DELIVERY)	(STORE CODE)	(STORE NAME)	(LOCATION)	(TIME OF DELIVERY)	(SPECIFICATION OF REQUESTED TIME OF DELIVERY)
01	C0012	CONVENIENCE STORE A	N34.45.17.2 E135.25.45.9	09:30	NO
02	F0144	CONVENIENCE STORE B	N34.45.16.7 E135.24.30.4	10:15	YES
03	J1087	CONVENIENCE STORE C	N34.44.59.6 E135.25.11.3	10:50	NO
04	A0056	CONVENIENCE STORE D	N34.44.47.3 E135.24.56.1	11:20	NO
05	K0239	CONVENIENCE STORE E	N34.45.30.4 E135.25.08.8	11:45	YES

CONTENTS OF OPERATIONS

(ORDER OF DELIVERY: 01, STORE CODE: C0012, STORE NAME: CONVENIENCE STORE A)

(NAME OF DELIVERED GOODS)	(QUANTITY)
○○ JUICE	8 CASES
×× COFFEE	3 CASES
△△ OULONG TEA	16 CASES

(ORDER OF DELIVERY: 02, STORE CODE: F0144, STORE NAME: CONVENIENCE STORE B)

(NAME OF DELIVERED GOODS)	(QUANTITY)
△△ WATER	9 CASES
□□ JUICE	4 CASES
◎◎ COFFEE	11 CASES

(ORDER OF DELIVERY: 03, STORE CODE: J1087, STORE NAME: CONVENIENCE STORE C)

(NAME OF DELIVERED GOODS)	(QUANTITY)
○× SODA POP	5 CASES
△□ TEA	13 CASES
×△ COLA	10 CASES

(ORDER OF DELIVERY: 04, STORE CODE: A0056, STORE NAME: CONVENIENCE STORE D)

(NAME OF DELIVERED GOODS)	(QUANTITY)
○○ JUICE	7 CASES
×△ COLA	6 CASES
△△ WATER	14 CASES

(ORDER OF DELIVERY: 05, STORE CODE: K0239, STORE NAME: CONVENIENCE STORE E)

(NAME OF DELIVERED GOODS)	(QUANTITY)
○○ JUICE	7 CASES
×△ COLA	6 CASES
△△ WATER	14 CASES

FIG.4

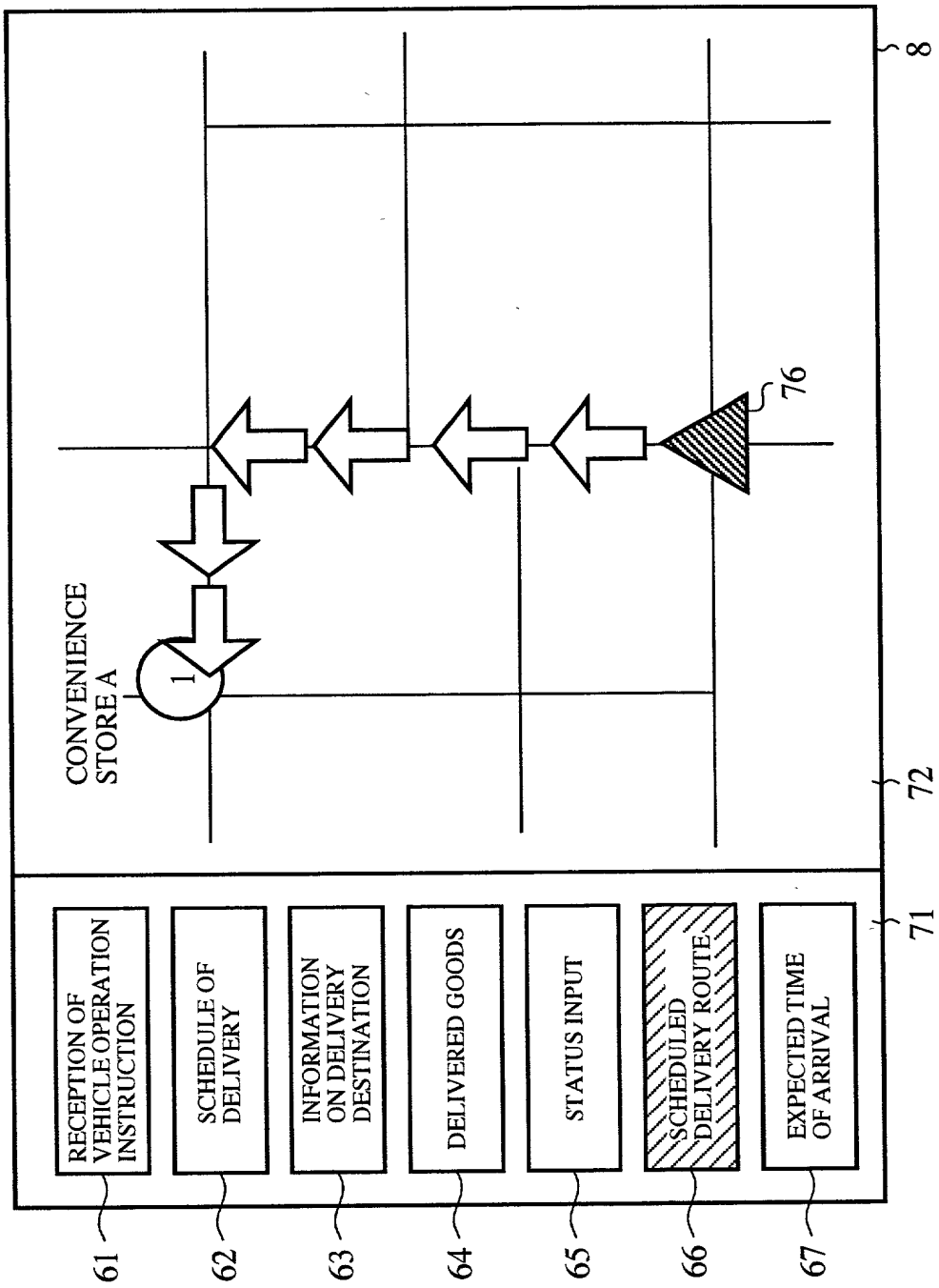

8
72
71
76
CONVENIENCE STORE A
1
RECEPTION OF VEHICLE OPERATION INSTRUCTION
SCHEDULE OF DELIVERY
INFORMATION ON DELIVERY DESTINATION
DELIVERED GOODS
STATUS INPUT
SCHEDULED DELIVERY ROUTE
EXPECTED TIME OF ARRIVAL
61
62
63
64
65
66
67

FIG.5

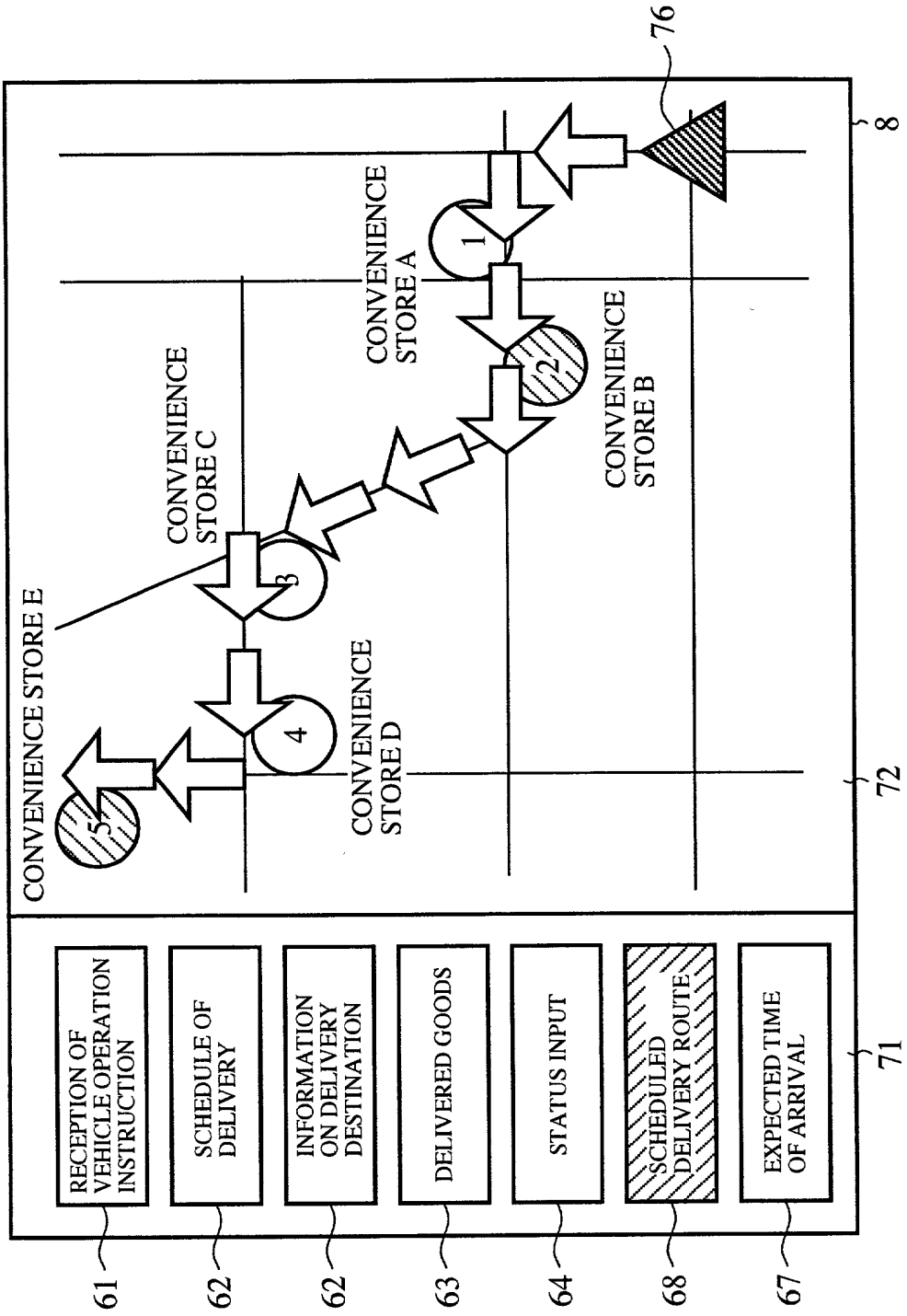

CONVENIENCE STORE E
CONVENIENCE STORE C
CONVENIENCE STORE A
CONVENIENCE STORE B
CONVENIENCE STORE D
1
2
3
4
5
76
8
72
71
RECEPTION OF VEHICLE OPERATION INSTRUCTION
SCHEDULE OF DELIVERY
INFORMATION ON DELIVERY DESTINATION
DELIVERED GOODS
STATUS INPUT
SCHEDULED DELIVERY ROUTE
EXPECTED TIME OF ARRIVAL
61
62
62
63
64
68
67

FIG.6

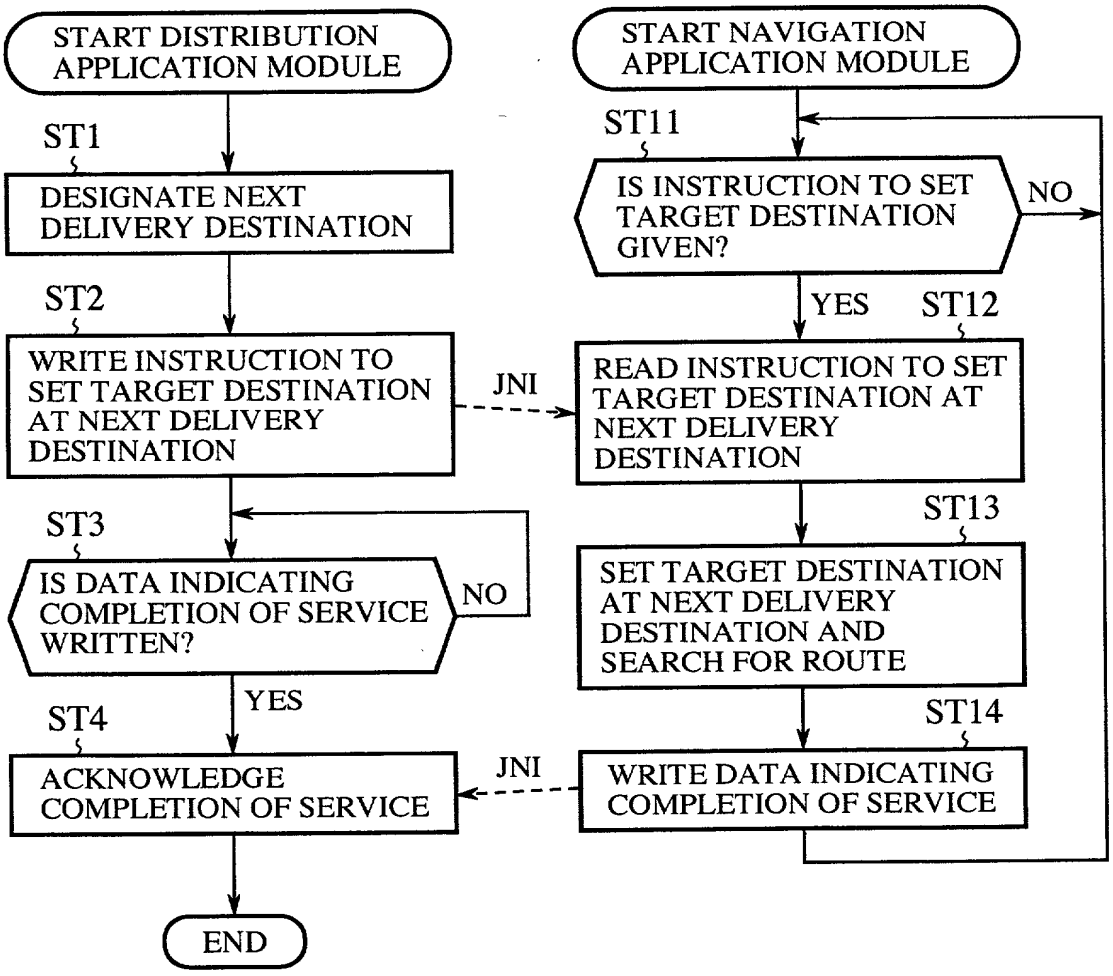

START DISTRIBUTION APPLICATION MODULE
ST1
DESIGNATE NEXT DELIVERY DESTINATION
ST2
WRITE INSTRUCTION TO SET TARGET DESTINATION AT NEXT DELIVERY DESTINATION
JNI
ST3
IS DATA INDICATING COMPLETION OF SERVICE WRITTEN?
NO
YES
ST4
ACKNOWLEDGE COMPLETION OF SERVICE
END
START NAVIGATION APPLICATION MODULE
ST11
IS INSTRUCTION TO SET TARGET DESTINATION GIVEN?
NO
YES
ST12
READ INSTRUCTION TO SET TARGET DESTINATION AT NEXT DELIVERY DESTINATION
ST13
SET TARGET DESTINATION AT NEXT DELIVERY DESTINATION AND SEARCH FOR ROUTE
ST14
WRITE DATA INDICATING COMPLETION OF SERVICE
JNI

FIG.7

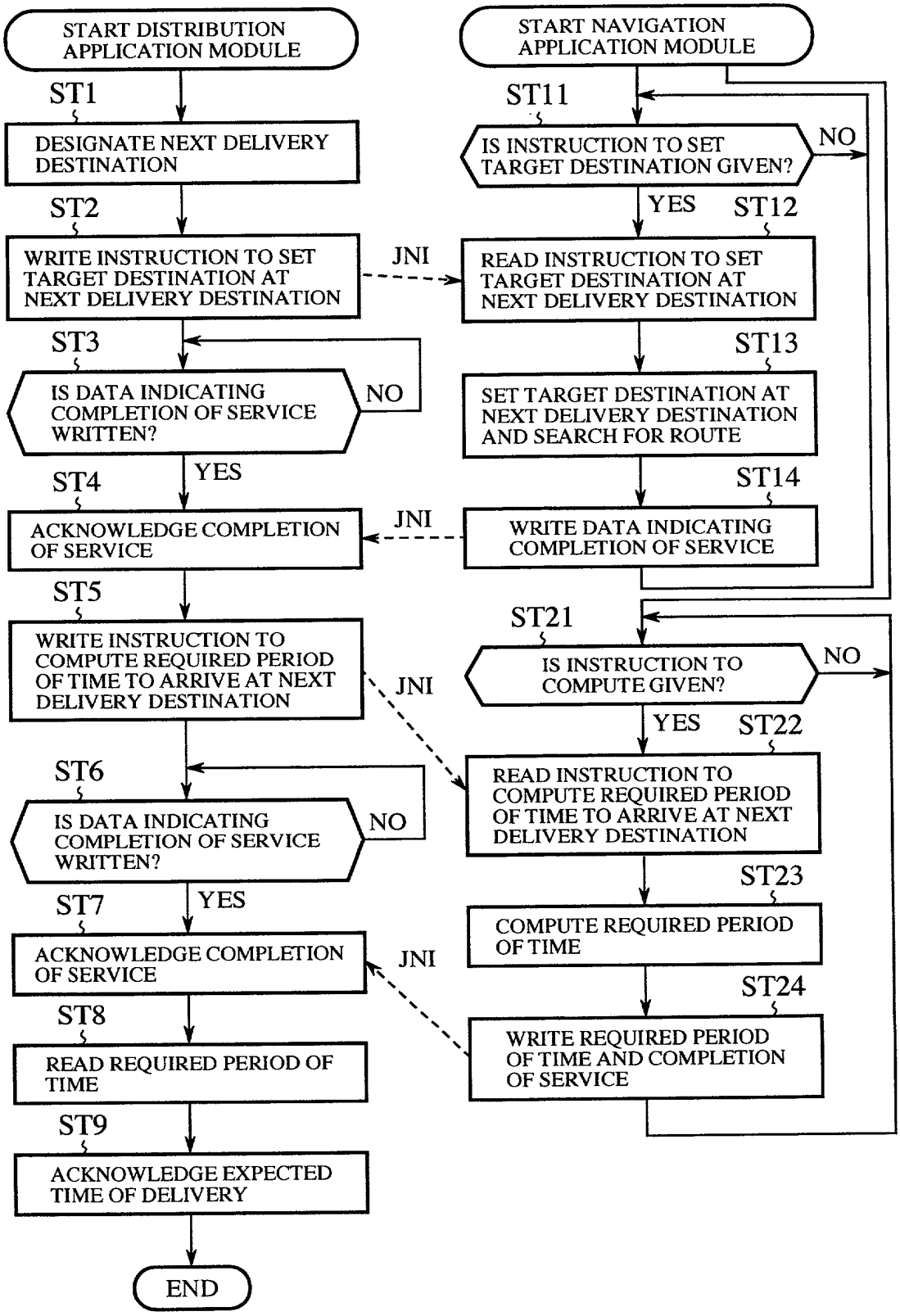

START DISTRIBUTION APPLICATION MODULE
ST1
DESIGNATE NEXT DELIVERY DESTINATION
ST2
WRITE INSTRUCTION TO SET TARGET DESTINATION AT NEXT DELIVERY DESTINATION
JNI
ST3
IS DATA INDICATING COMPLETION OF SERVICE WRITTEN?
NO
YES
ST4
ACKNOWLEDGE COMPLETION OF SERVICE
ST5
WRITE INSTRUCTION TO COMPUTE REQUIRED PERIOD OF TIME TO ARRIVE AT NEXT DELIVERY DESTINATION
JNI
ST6
IS DATA INDICATING COMPLETION OF SERVICE WRITTEN?
NO
YES
ST7
ACKNOWLEDGE COMPLETION OF SERVICE
JNI
ST8
READ REQUIRED PERIOD OF TIME
ST9
ACKNOWLEDGE EXPECTED TIME OF DELIVERY
END
START NAVIGATION APPLICATION MODULE
ST11
IS INSTRUCTION TO SET TARGET DESTINATION GIVEN?
NO
YES
ST12
READ INSTRUCTION TO SET TARGET DESTINATION AT NEXT DELIVERY DESTINATION
ST13
SET TARGET DESTINATION AT NEXT DELIVERY DESTINATION AND SEARCH FOR ROUTE
ST14
WRITE DATA INDICATING COMPLETION OF SERVICE
JNI
ST21
IS INSTRUCTION TO COMPUTE GIVEN?
NO
YES
ST22
READ INSTRUCTION TO COMPUTE REQUIRED PERIOD OF TIME TO ARRIVE AT NEXT DELIVERY DESTINATION
JNI
ST23
COMPUTE REQUIRED PERIOD OF TIME
ST24
WRITE REQUIRED PERIOD OF TIME AND COMPLETION OF SERVICE
JNI

FIG.8

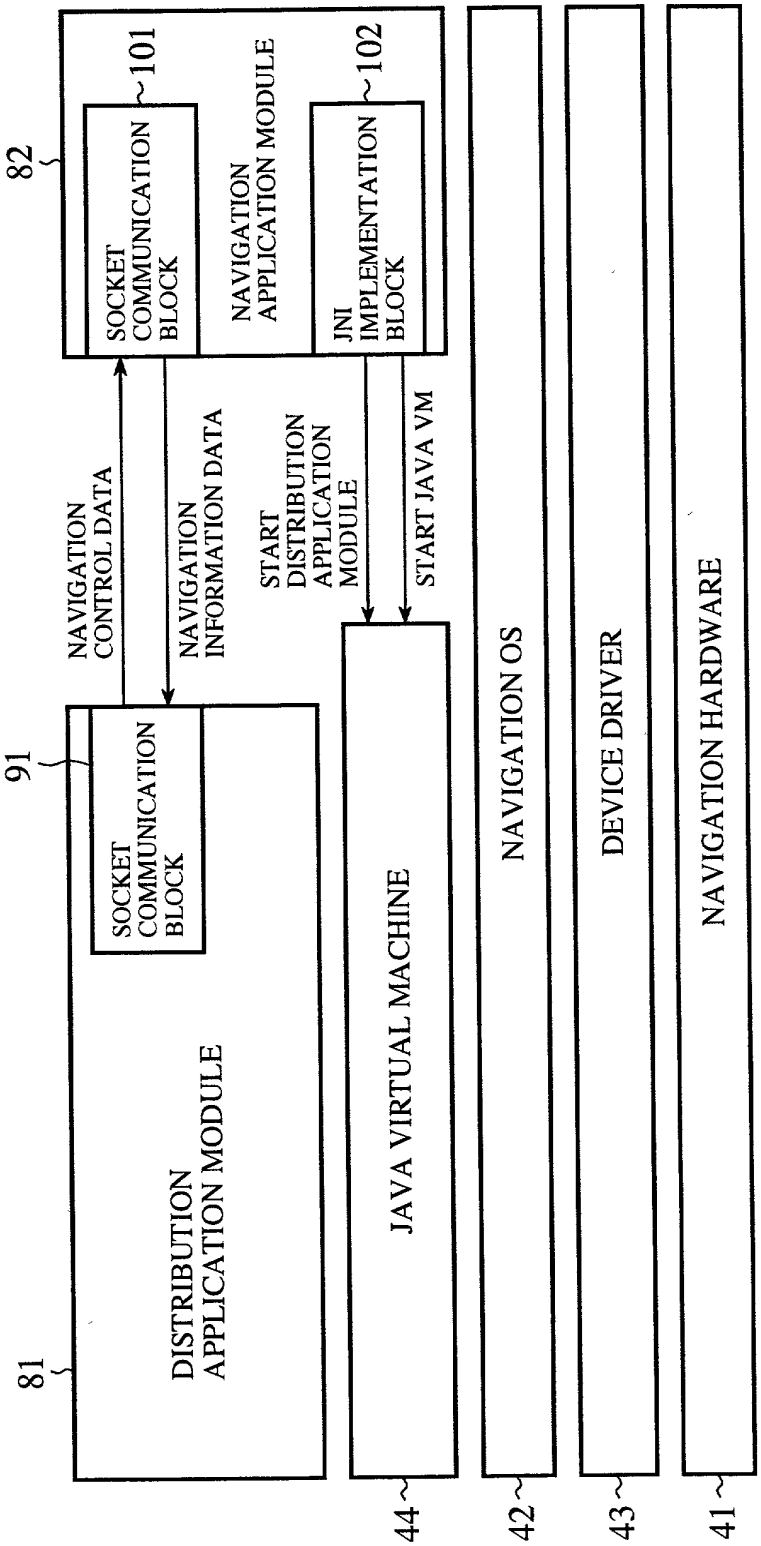

82
SOCKET COMMUNICATION BLOCK
101
NAVIGATION APPLICATION MODULE
JNI IMPLEMENTATION BLOCK
102
NAVIGATION CONTROL DATA
NAVIGATION INFORMATION DATA
START DISTRIBUTION APPLICATION MODULE
START JAVA VM
91
SOCKET COMMUNICATION BLOCK
81
DISTRIBUTION APPLICATION MODULE
JAVA VIRTUAL MACHINE
NAVIGATION OS
DEVICE DRIVER
NAVIGATION HARDWARE
44
42
43
41

FIG.9

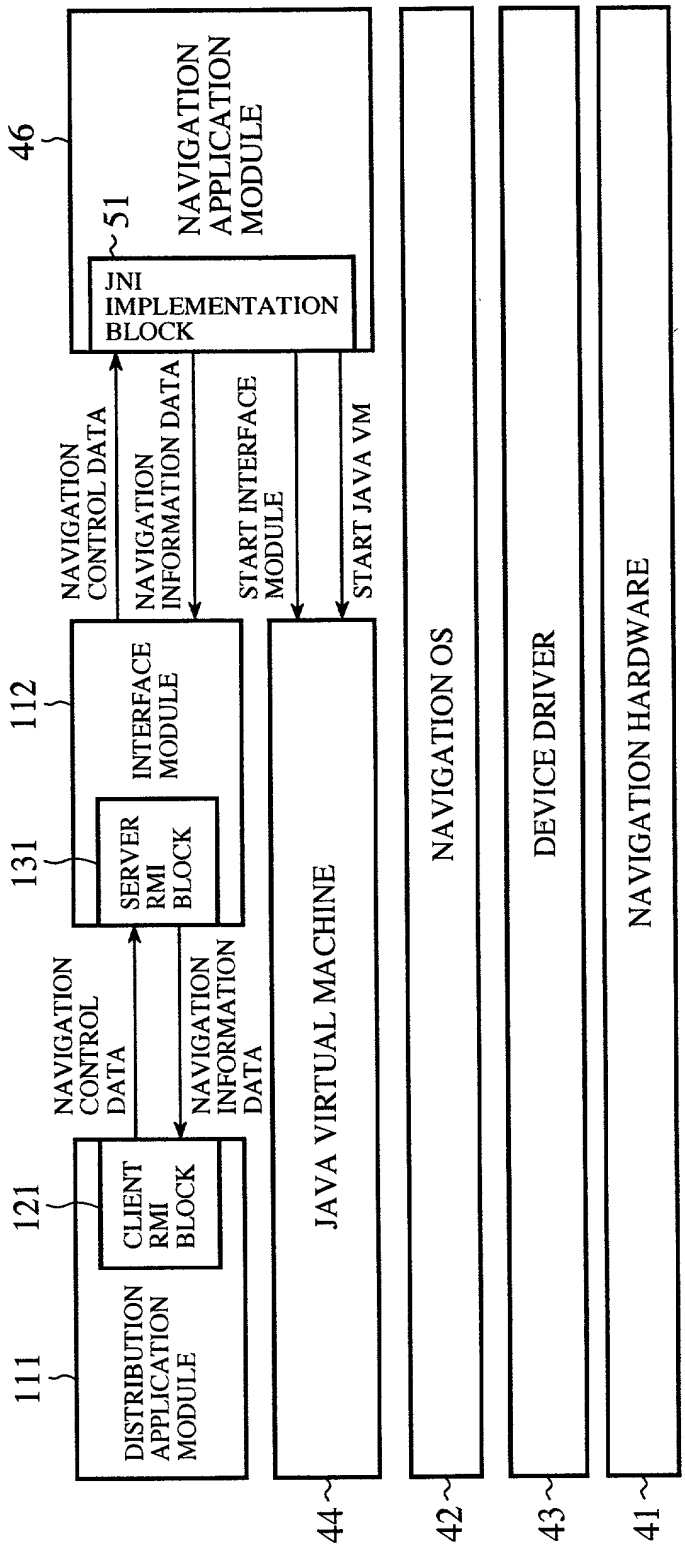

46
NAVIGATION APPLICATION MODULE
51
JNI IMPLEMENTATION BLOCK
NAVIGATION CONTROL DATA
NAVIGATION INFORMATION DATA
START INTERFACE MODULE
START JAVA VM
112
INTERFACE MODULE
131
SERVER RMI BLOCK
NAVIGATION CONTROL DATA
NAVIGATION INFORMATION DATA
121
CLIENT RMI BLOCK
111
DISTRIBUTION APPLICATION MODULE
JAVA VIRTUAL MACHINE
NAVIGATION OS
DEVICE DRIVER
NAVIGATION HARDWARE
44
42
43
41

FIG.10

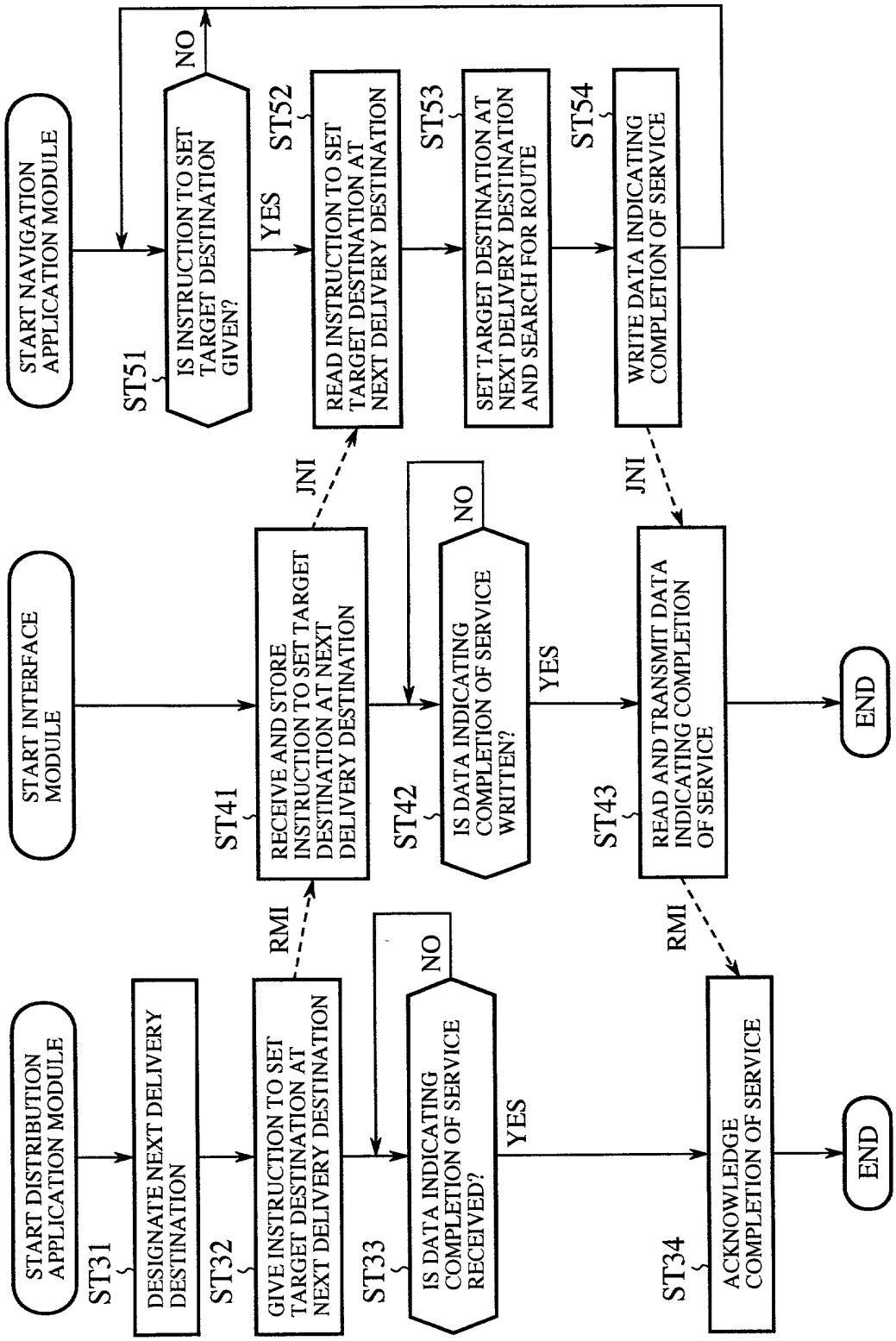

START DISTRIBUTION APPLICATION MODULE
ST31
DESIGNATE NEXT DELIVERY DESTINATION
ST32
GIVE INSTRUCTION TO SET TARGET DESTINATION AT NEXT DELIVERY DESTINATION
RMI
ST33
IS DATA INDICATING COMPLETION OF SERVICE RECEIVED?
NO
YES
ST34
ACKNOWLEDGE COMPLETION OF SERVICE
END
START INTERFACE MODULE
ST41
RECEIVE AND STORE INSTRUCTION TO SET TARGET DESTINATION AT NEXT DELIVERY DESTINATION
JNI
ST42
IS DATA INDICATING COMPLETION OF SERVICE WRITTEN?
NO
YES
ST43
READ AND TRANSMIT DATA INDICATING COMPLETION OF SERVICE
RMI
END
START NAVIGATION APPLICATION MODULE
ST51
IS INSTRUCTION TO SET TARGET DESTINATION GIVEN?
NO
YES
ST52
READ INSTRUCTION TO SET TARGET DESTINATION AT NEXT DELIVERY DESTINATION
JNI
ST53
SET TARGET DESTINATION AT NEXT DELIVERY DESTINATION AND SEARCH FOR ROUTE
ST54
WRITE DATA INDICATING COMPLETION OF SERVICE

FIG. 11

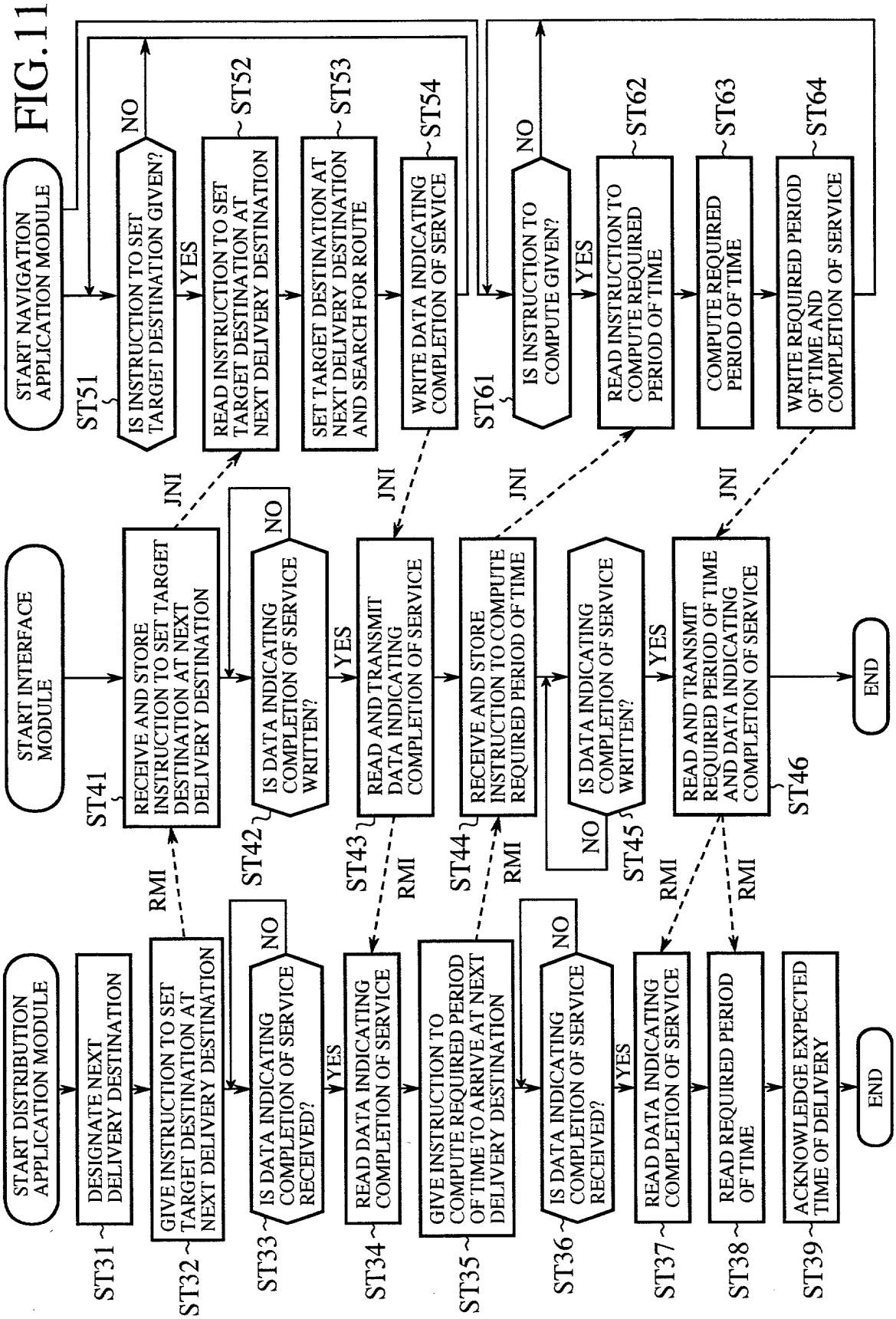

START DISTRIBUTION APPLICATION MODULE
DESIGNATE NEXT DELIVERY DESTINATION
ST31
GIVE INSTRUCTION TO SET TARGET DESTINATION AT NEXT DELIVERY DESTINATION
ST32
IS DATA INDICATING COMPLETION OF SERVICE RECEIVED?
ST33
NO
YES
READ DATA INDICATING COMPLETION OF SERVICE
ST34
GIVE INSTRUCTION TO COMPUTE REQUIRED PERIOD OF TIME TO ARRIVE AT NEXT DELIVERY DESTINATION
ST35
IS DATA INDICATING COMPLETION OF SERVICE RECEIVED?
ST36
NO
YES
READ DATA INDICATING COMPLETION OF SERVICE
ST37
READ REQUIRED PERIOD OF TIME
ST38
ACKNOWLEDGE EXPECTED TIME OF DELIVERY
ST39
END
RMI
START INTERFACE MODULE
RECEIVE AND STORE INSTRUCTION TO SET TARGET DESTINATION AT NEXT DELIVERY DESTINATION
ST41
IS DATA INDICATING COMPLETION OF SERVICE WRITTEN?
ST42
NO
YES
READ AND TRANSMIT DATA INDICATING COMPLETION OF SERVICE
ST43
RECEIVE AND STORE INSTRUCTION TO COMPUTE REQUIRED PERIOD OF TIME
ST44
IS DATA INDICATING COMPLETION OF SERVICE WRITTEN?
ST45
NO
YES
READ AND TRANSMIT REQUIRED PERIOD OF TIME AND DATA INDICATING COMPLETION OF SERVICE
ST46
END
JNI
START NAVIGATION APPLICATION MODULE
IS INSTRUCTION TO SET TARGET DESTINATION GIVEN?
ST51
NO
YES
READ INSTRUCTION TO SET TARGET DESTINATION AT NEXT DELIVERY DESTINATION
ST52
SET TARGET DESTINATION AT NEXT DELIVERY DESTINATION AND SEARCH FOR ROUTE
ST53
WRITE DATA INDICATING COMPLETION OF SERVICE
ST54
IS INSTRUCTION TO COMPUTE GIVEN?
ST61
NO
YES
READ INSTRUCTION TO COMPUTE REQUIRED PERIOD OF TIME
ST62
COMPUTE REQUIRED PERIOD OF TIME
ST63
WRITE REQUIRED PERIOD OF TIME AND COMPLETION OF SERVICE
ST64

FIG.12

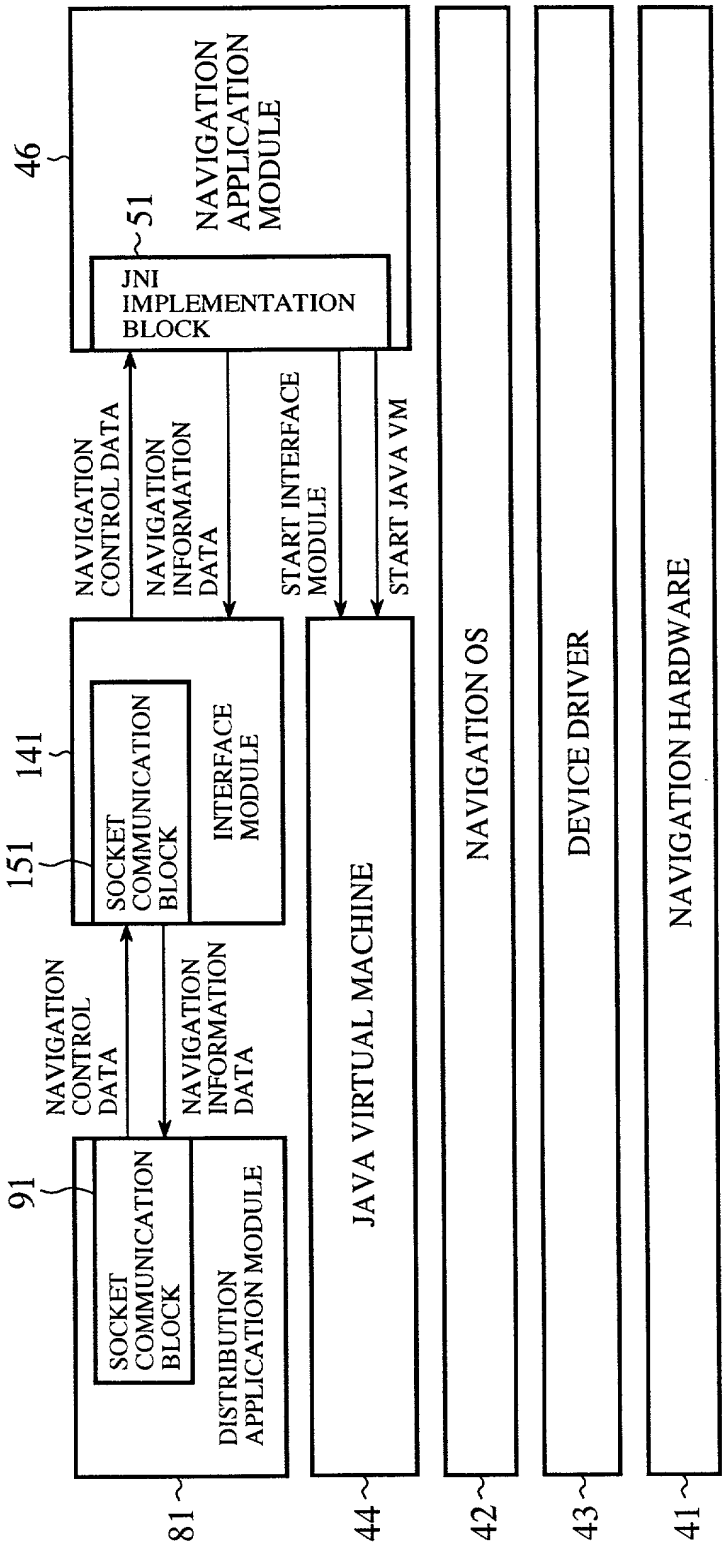

46
NAVIGATION APPLICATION MODULE
51
JNI IMPLEMENTATION BLOCK
NAVIGATION CONTROL DATA
NAVIGATION INFORMATION DATA
START INTERFACE MODULE
START JAVA VM
141
151
SOCKET COMMUNICATION BLOCK
INTERFACE MODULE
NAVIGATION CONTROL DATA
NAVIGATION INFORMATION DATA
91
SOCKET COMMUNICATION BLOCK
DISTRIBUTION APPLICATION MODULE
JAVA VIRTUAL MACHINE
NAVIGATION OS
DEVICE DRIVER
NAVIGATION HARDWARE
81
44
42
43
41

FIG.13

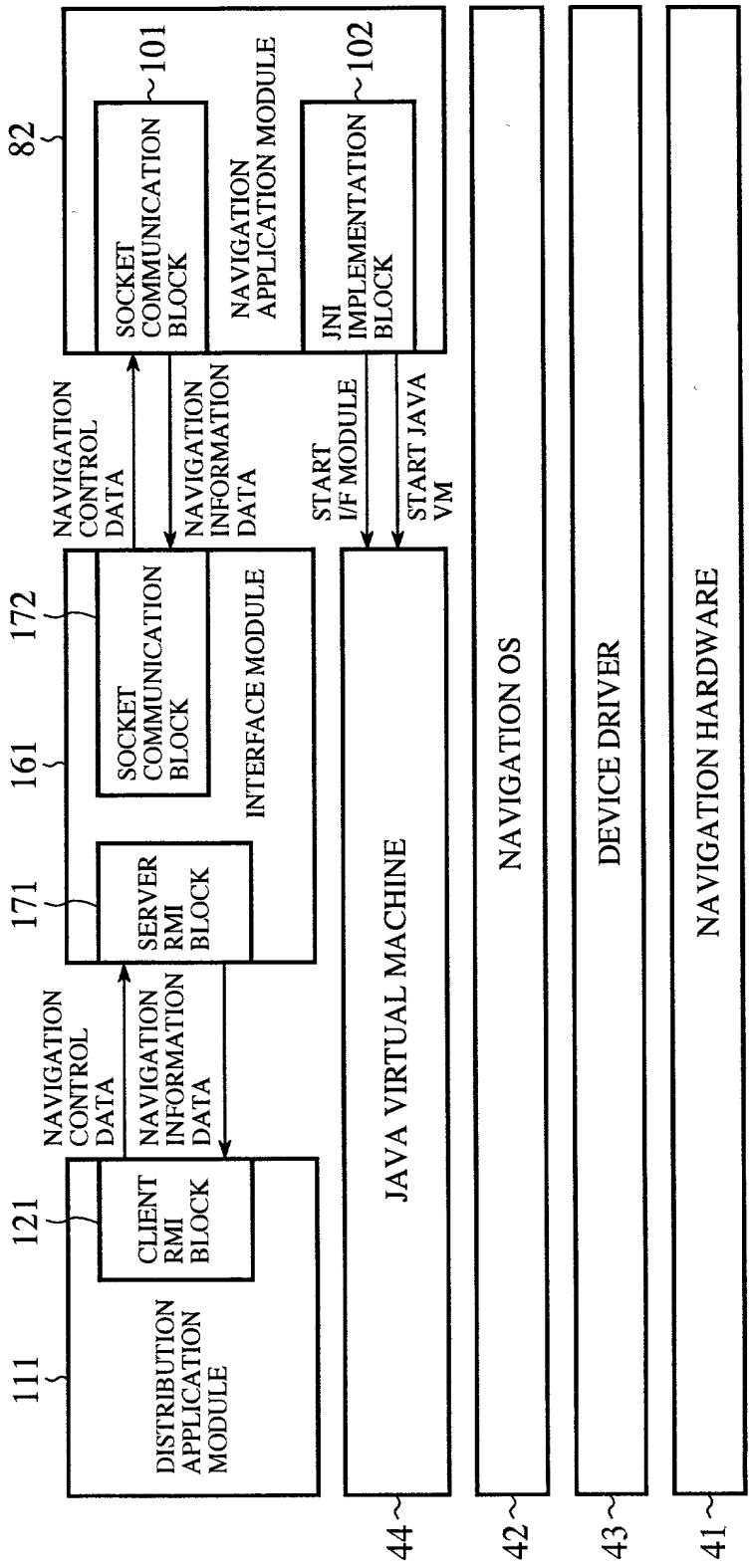

82
101
102
SOCKET COMMUNICATION BLOCK
NAVIGATION APPLICATION MODULE
JNI IMPLEMENTATION BLOCK
NAVIGATION CONTROL DATA
NAVIGATION INFORMATION DATA
START I/F MODULE
START JAVA VM
172
161
171
SOCKET COMMUNICATION BLOCK
INTERFACE MODULE
SERVER RMI BLOCK
NAVIGATION CONTROL DATA
NAVIGATION INFORMATION DATA
121
111
CLIENT RMI BLOCK
DISTRIBUTION APPLICATION MODULE
JAVA VIRTUAL MACHINE
NAVIGATION OS
DEVICE DRIVER
NAVIGATION HARDWARE
44
42
43
41

FIG.14

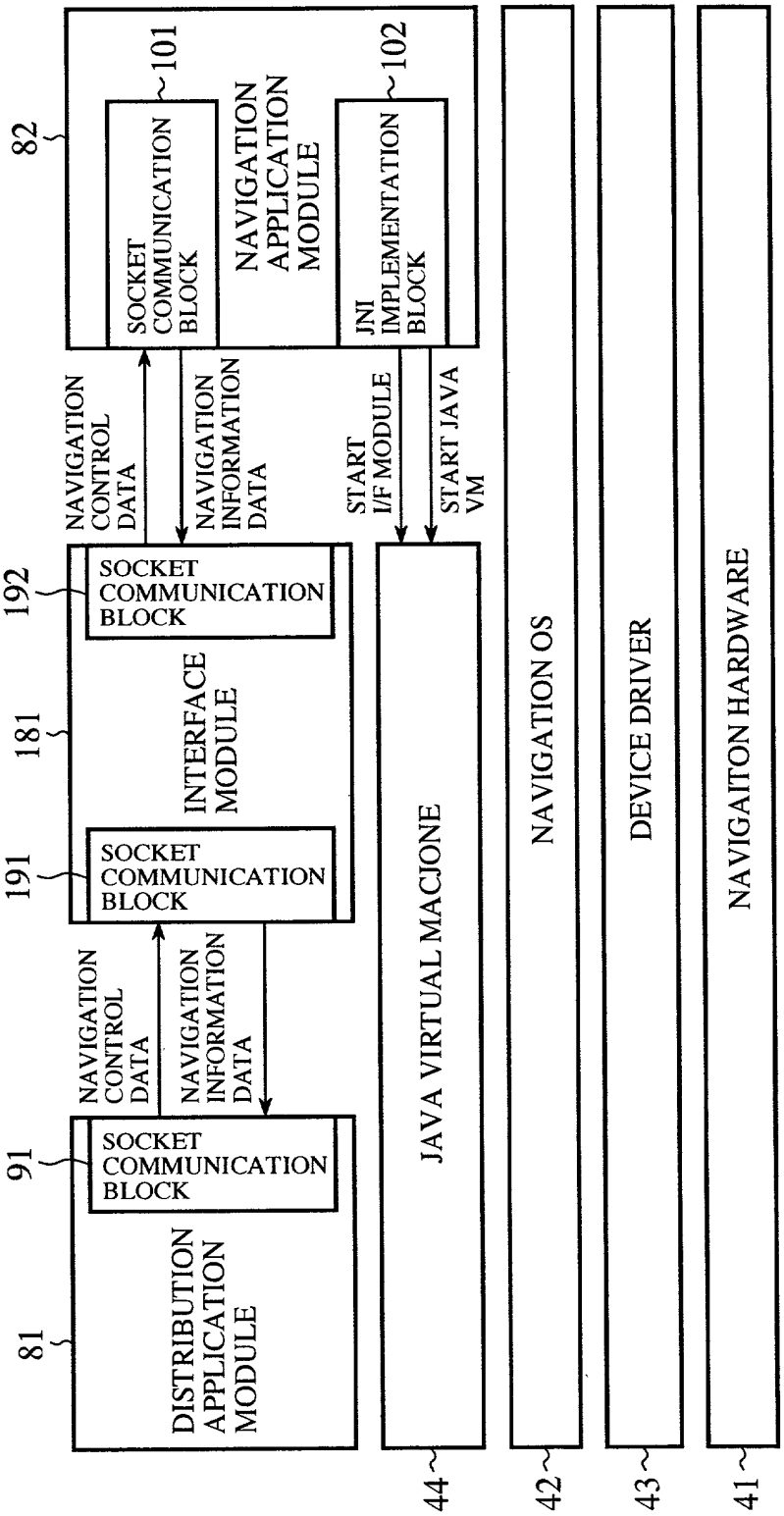

82
NAVIGATION APPLICATION MODULE
101
SOCKET COMMUNICATION BLOCK
102
JNI IMPLEMENTATION BLOCK
NAVIGATION CONTROL DATA
NAVIGATION INFORMATION DATA
START I/F MODULE
START JAVA VM
192
SOCKET COMMUNICATION BLOCK
181
INTERFACE MODULE
191
SOCKET COMMUNICATION BLOCK
NAVIGATION CONTROL DATA
NAVIGATION INFORMATION DATA
91
SOCKET COMMUNICATION BLOCK
81
DISTRIBUTION APPLICATION MODULE
JAVA VIRTUAL MACIONE
NAVIGATION OS
DEVICE DRIVER
NAVIGAITON HARDWARE
44
42
43
41

FIG.15

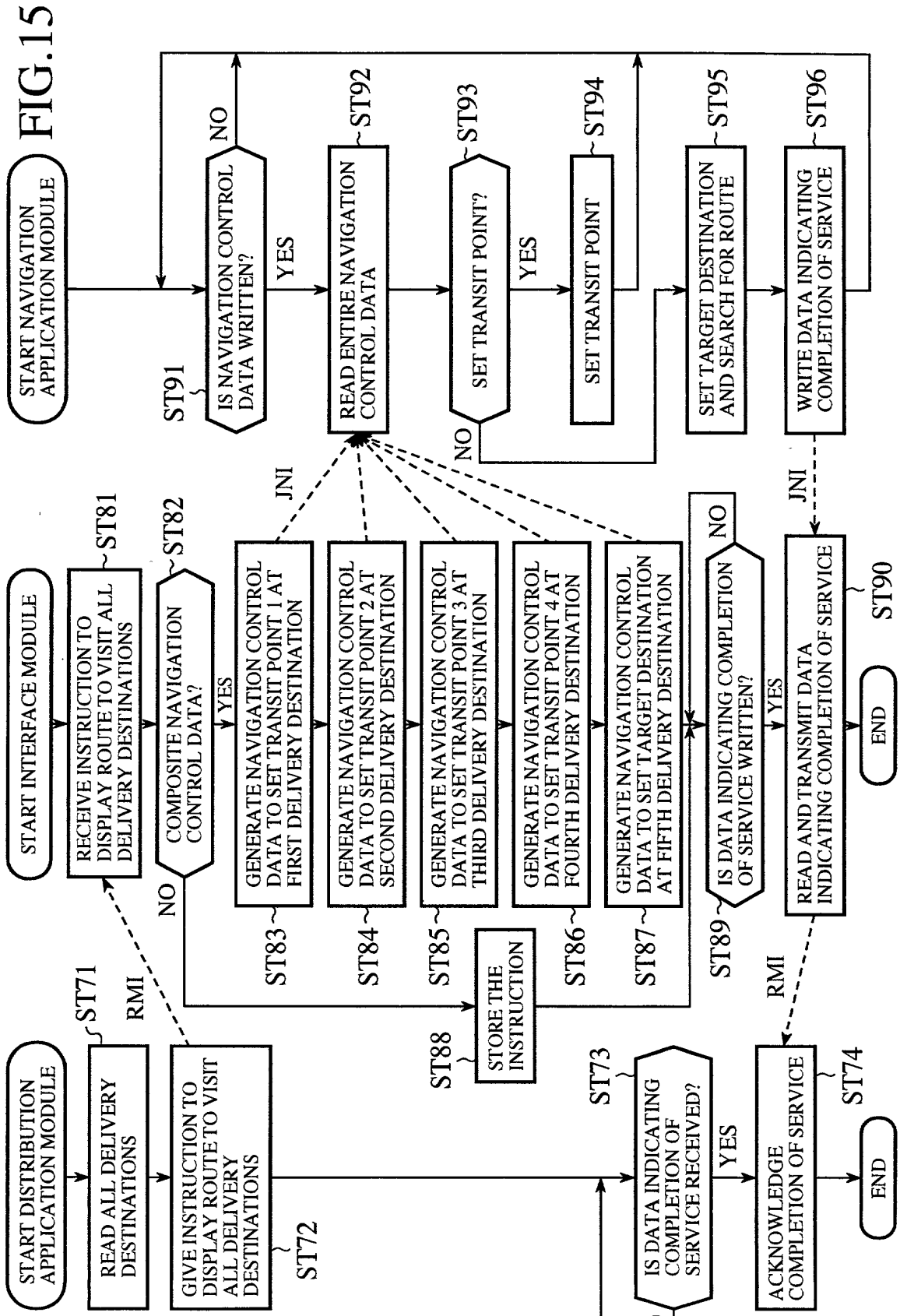

START DISTRIBUTION APPLICATION MODULE
READ ALL DELIVERY DESTINATIONS
GIVE INSTRUCTION TO DISPLAY ROUTE TO VISIT ALL DELIVERY DESTINATIONS
ST71
ST72
RMI
START INTERFACE MODULE
RECEIVE INSTRUCTION TO DISPLAY ROUTE TO VISIT ALL DELIVERY DESTINATIONS
ST81
COMPOSITE NAVIGATION CONTROL DATA?
ST82
YES
NO
JNI
GENERATE NAVIGATION CONTROL DATA TO SET TRANSIT POINT 1 AT FIRST DELIVERY DESTINATION
ST83
GENERATE NAVIGATION CONTROL DATA TO SET TRANSIT POINT 2 AT SECOND DELIVERY DESTINATION
ST84
GENERATE NAVIGATION CONTROL DATA TO SET TRANSIT POINT 3 AT THIRD DELIVERY DESTINATION
ST85
GENERATE NAVIGATION CONTROL DATA TO SET TRANSIT POINT 4 AT FOURTH DELIVERY DESTINATION
ST86
GENERATE NAVIGATION CONTROL DATA TO SET TARGET DESTINATION AT FIFTH DELIVERY DESTINATION
ST87
STORE THE INSTRUCTION
ST88
IS DATA INDICATING COMPLETION OF SERVICE WRITTEN?
ST89
NO
YES
JNI
READ AND TRANSMIT DATA INDICATING COMPLETION OF SERVICE
ST90
END
RMI
IS DATA INDICATING COMPLETION OF SERVICE RECEIVED?
ST73
NO
YES
ACKNOWLEDGE COMPLETION OF SERVICE
ST74
END
START NAVIGATION APPLICATION MODULE
IS NAVIGATION CONTROL DATA WRITTEN?
ST91
NO
YES
READ ENTIRE NAVIGATION CONTROL DATA
ST92
SET TRANSIT POINT?
ST93
YES
NO
SET TRANSIT POINT
ST94
SET TARGET DESTINATION AND SEARCH FOR ROUTE
ST95
WRITE DATA INDICATING COMPLETION OF SERVICE
ST96

FIG.16

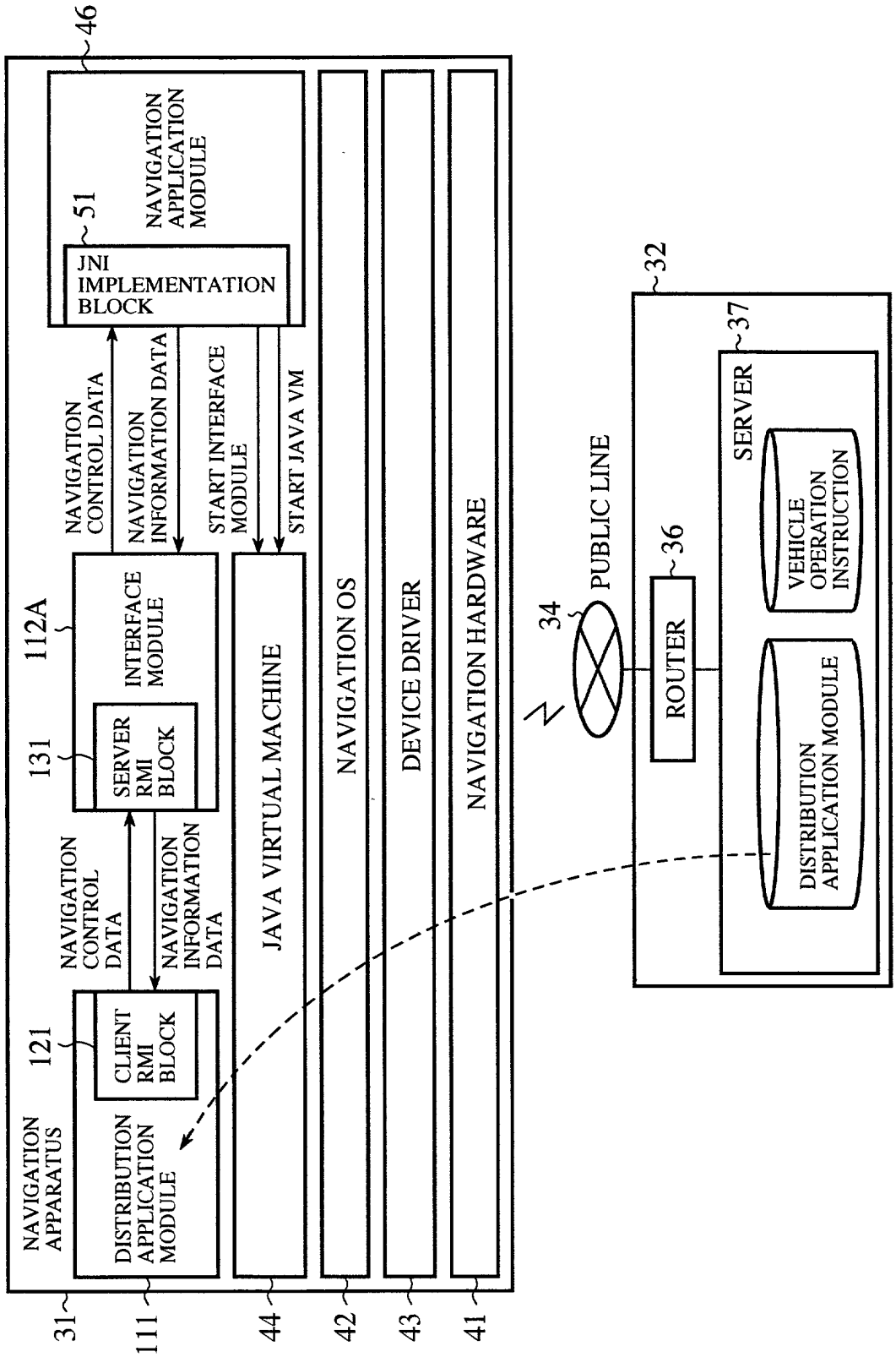

46
NAVIGATION APPLICATION MODULE
51
JNI IMPLEMENTATION BLOCK
NAVIGATION CONTROL DATA
NAVIGATION INFORMATION DATA
START INTERFACE MODULE
START JAVA VM
112A
INTERFACE MODULE
131
SERVER RMI BLOCK
NAVIGATION CONTROL DATA
NAVIGATION INFORMATION DATA
121
CLIENT RMI BLOCK
NAVIGATION APPARATUS
DISTRIBUTION APPLICATION MODULE
JAVA VIRTUAL MACHINE
NAVIGATION OS
DEVICE DRIVER
NAVIGATION HARDWARE
31
111
44
42
43
41
34
PUBLIC LINE
32
ROUTER
36
SERVER
37
VEHICLE OPERATION INSTRUCTION
DISTRIBUTION APPLICATION MODULE

FIG.17

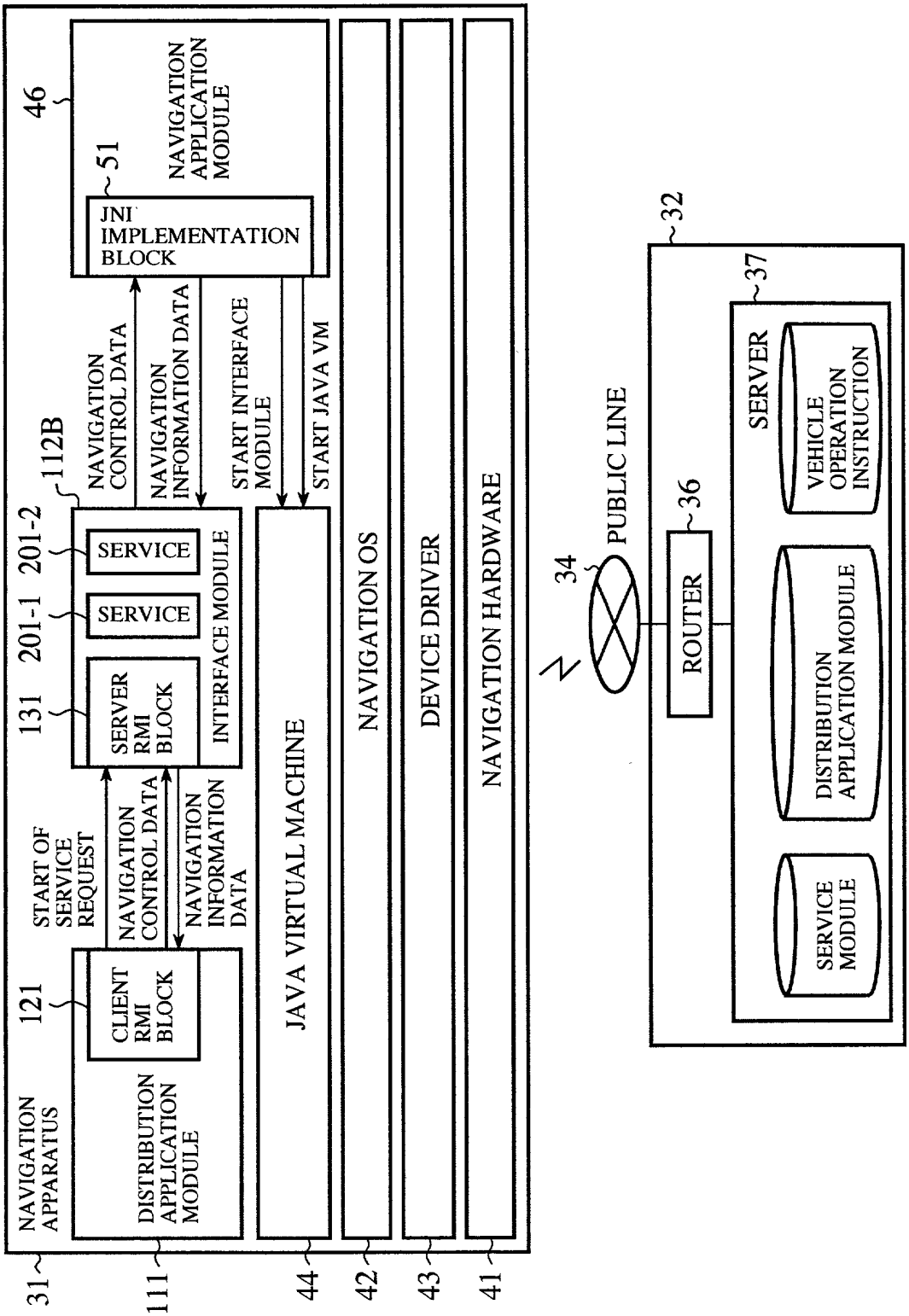

NAVIGATION APPARATUS
31
DISTRIBUTION APPLICATION MODULE
111
121
CLIENT RMI BLOCK
START OF SERVICE REQUEST
NAVIGATION CONTROL DATA
NAVIGATION INFORMATION DATA
131
SERVER RMI BLOCK
201-1
SERVICE
201-2
SERVICE
INTERFACE MODULE
112B
NAVIGATION CONTROL DATA
NAVIGATION INFORMATION DATA
START INTERFACE MODULE
START JAVA VM
46
NAVIGATION APPLICATION MODULE
51
JNI IMPLEMENTATION BLOCK
JAVA VIRTUAL MACHINE
44
NAVIGATION OS
42
DEVICE DRIVER
43
NAVIGATION HARDWARE
41
34
PUBLIC LINE
32
ROUTER
36
SERVER
37
SERVICE MODULE
DISTRIBUTION APPLICATION MODULE
VEHICLE OPERATION INSTRUCTION

FIG.18

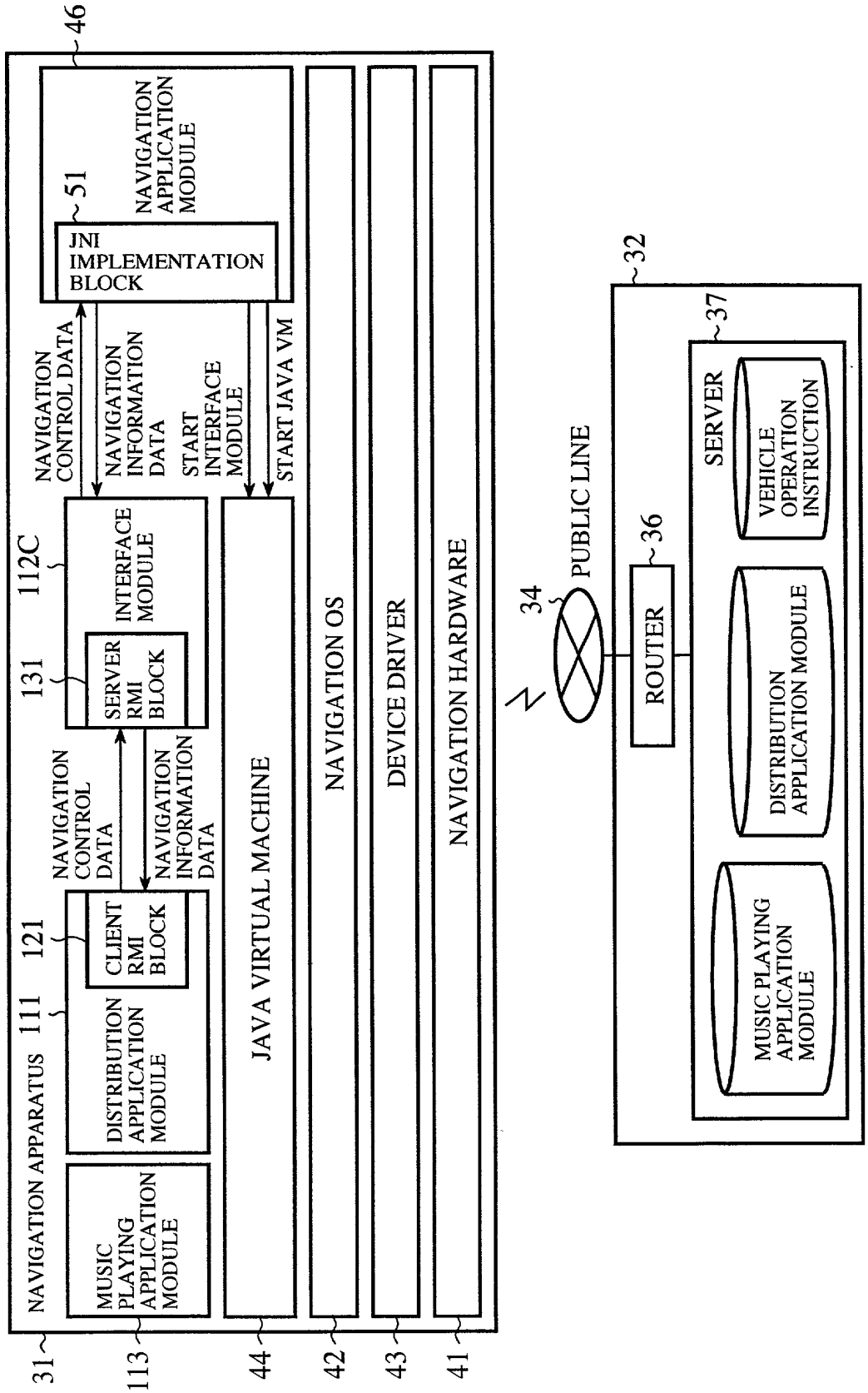

NAVIGATION APPARATUS
31
MUSIC PLAYING APPLICATION MODULE
113
DISTRIBUTION APPLICATION MODULE
111
CLIENT RMI BLOCK
121
NAVIGATION CONTROL DATA
NAVIGATION INFORMATION DATA
SERVER RMI BLOCK
131
INTERFACE MODULE
112C
JAVA VIRTUAL MACHINE
44
NAVIGATION OS
42
DEVICE DRIVER
43
NAVIGATION HARDWARE
41
NAVIGATION CONTROL DATA
NAVIGATION INFORMATION DATA
START INTERFACE MODULE
START JAVA VM
JNI IMPLEMENTATION BLOCK
51
NAVIGATION APPLICATION MODULE
46
34
PUBLIC LINE
ROUTER
36
32
SERVER
37
MUSIC PLAYING APPLICATION MODULE
DISTRIBUTION APPLICATION MODULE
VEHICLE OPERATION INSTRUCTION

FIG.19

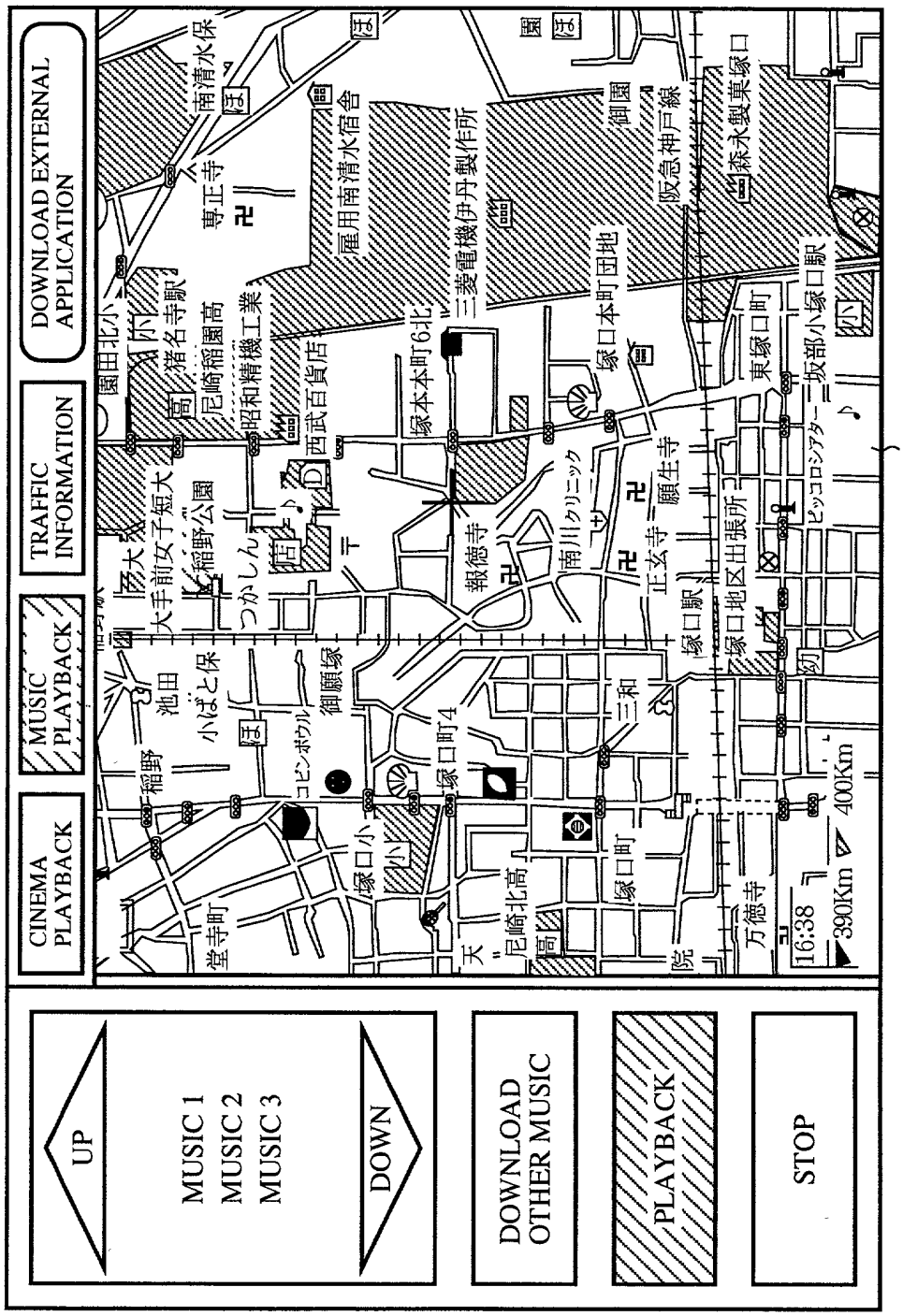

CINEMA PLAYBACK
MUSIC PLAYBACK
TRAFFIC INFORMATION
DOWNLOAD EXTERNAL APPLICATION
UP
MUSIC 1
MUSIC 2
MUSIC 3
DOWN
DOWNLOAD OTHER MUSIC
PLAYBACK
STOP
8
稲野
池田
小ばと保
堂寺町
コピンボウル
塚口小
御願塚
塚口町4
報徳寺
南川クリニック
三和
塚口町
正玄寺
願生寺
塚口駅
塚口地区出張所
万徳寺
塚本本町6北
三菱電機伊丹製作所
西武百貨店
雇用南清水宿舎
専正寺
尼崎稲園高
昭和精機工業
稲野公園
大手前女子短大
猪名寺駅
南清水保
塚口本町団地
御園
阪急神戸線
東塚口町
ヒッコシアター
坂部小塚口駅
森永製菓塚口
16:38
390Km
400Km

FIG.20

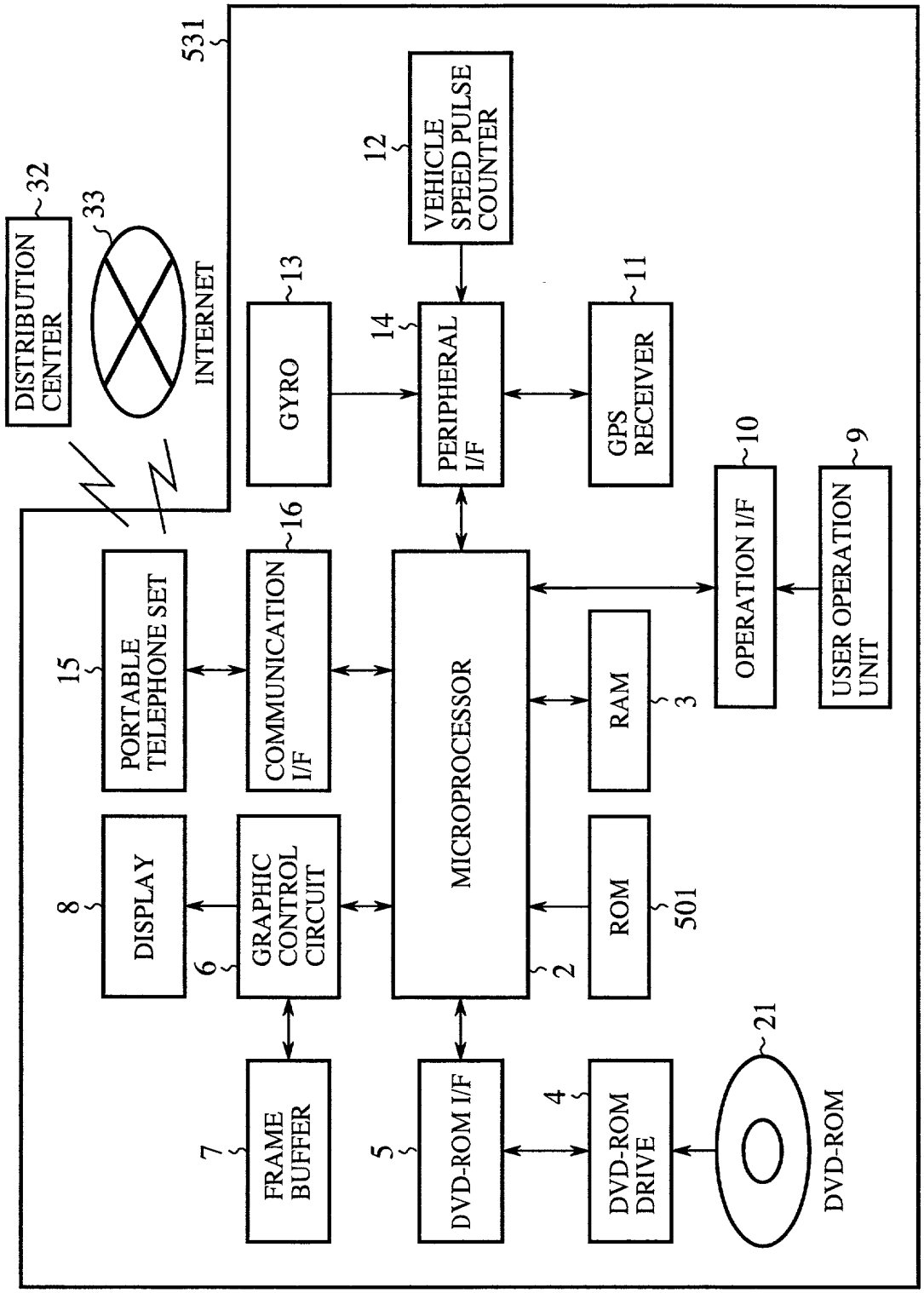
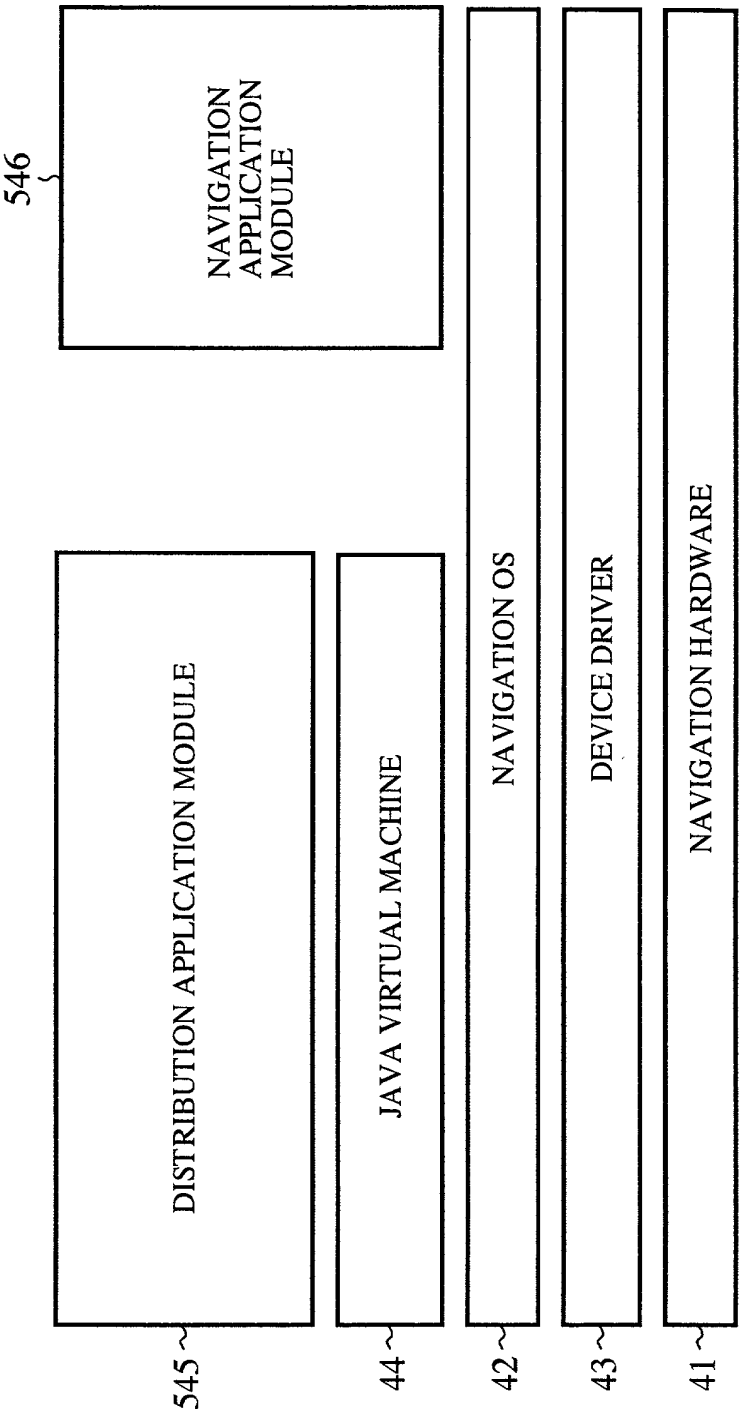

531
DISTRIBUTION CENTER
32
33
INTERNET
12
VEHICLE SPEED PULSE COUNTER
13
GYRO
14
PERIPHERAL I/F
11
GPS RECEIVER
16
COMMUNICATION I/F
15
PORTABLE TELEPHONE SET
10
OPERATION I/F
9
USER OPERATION UNIT
MICROPROCESSOR
2
RAM
3
8
DISPLAY
6
GRAPHIC CONTROL CIRCUIT
ROM
501
7
FRAME BUFFER
5
DVD-ROM I/F
4
DVD-ROM DRIVE
21
DVD-ROM

FIG.21


546
NAVIGATION APPLICATION MODULE
DISTRIBUTION APPLICATION MODULE
JAVA VIRTUAL MACHINE
NAVIGATION OS
DEVICE DRIVER
NAVIGATION HARDWARE
545
44
42
43
41

TOKTO" 6Eth9760

FIG.22

VEHICLE OPERATION INSTRUCTION

VEHICLE INFORMATION

VEHICLE ID: VO1 (VEHICLE FOR DELIVERY 1)
DRIVER: SUZUKI ICHIRO
DATE AND TIME OF DELIVERY: '99-3-31
DISTRICT OF DELIVERY: HYOGO-KEN AMAGASAKI-SHI
NUMBER OF DESTINATIONS OF DELIVERY: FIVE
DELIVERED WEIGHT: 2t

ORDER OF DELIVERY AND LOCATIONS OF DESTINATIONS OF DELIVERY

(ORDER OF DELIVERY)	(STORE CODE)	(STORE NAME)	(LOCATION)	(TIME OF DELIVERY)	(SPECIFICATION OF REQUESTED TIME OF DELIVERY)
01	C0012	CONVENIENCE STORE A	AMAGASAKI-SHI TSUKAGUCHI HONCYO 6-12-10	09:30	NO
02	F0144	CONVENIENCE STORE B	AMAGASAKI-SHI TSUKAGUCHI HONCYO 5-7-4	10:15	YES
03	J1087	CONVENIENCE STORE C	AMAGASAKI-SHI TSUKAGUCHI HONCYO 4-20-1	10:50	NO
04	A0056	CONVENIENCE STORE D	AMAGASAKI-SHI TSUKAGUCHI HONCYO 3-15-19	11:20	NO
05	K0239	CONVENIENCE STORE E	AMAGASAKI-SHI TSUKAGUCHI HONCYO 8-2-3	11:45	YES

CONTENTS OF OPERATIONS

(ORDER OF DELIVERY: 01, STORE CODE: C0012, STORE NAME: CONVENIENCE STORE A)

(NAME OF DELIVERED GOODS)	(QUANTITY)
○○ JUICE	8 CASES
×× COFFEE	3 CASES
△△ OULONG TEA	16 CASES

(ORDER OF DELIVERY: 02, STORE CODE: F0144, STORE NAME: CONVENIENCE STORE B)

(NAME OF DELIVERED GOODS)	(QUANTITY)
△△ WATER	9 CASES
□□ JUICE	4 CASES
◎◎ COFFEE	11 CASES

(ORDER OF DELIVERY: 03, STORE CODE: J1087, STORE NAME: CONVENIENCE STORE C)

(NAME OF DELIVERED GOODS)	(QUANTITY)
○× SODA POP	5 CASES
△□ TEA	13 CASES
×△ COLA	10 CASES

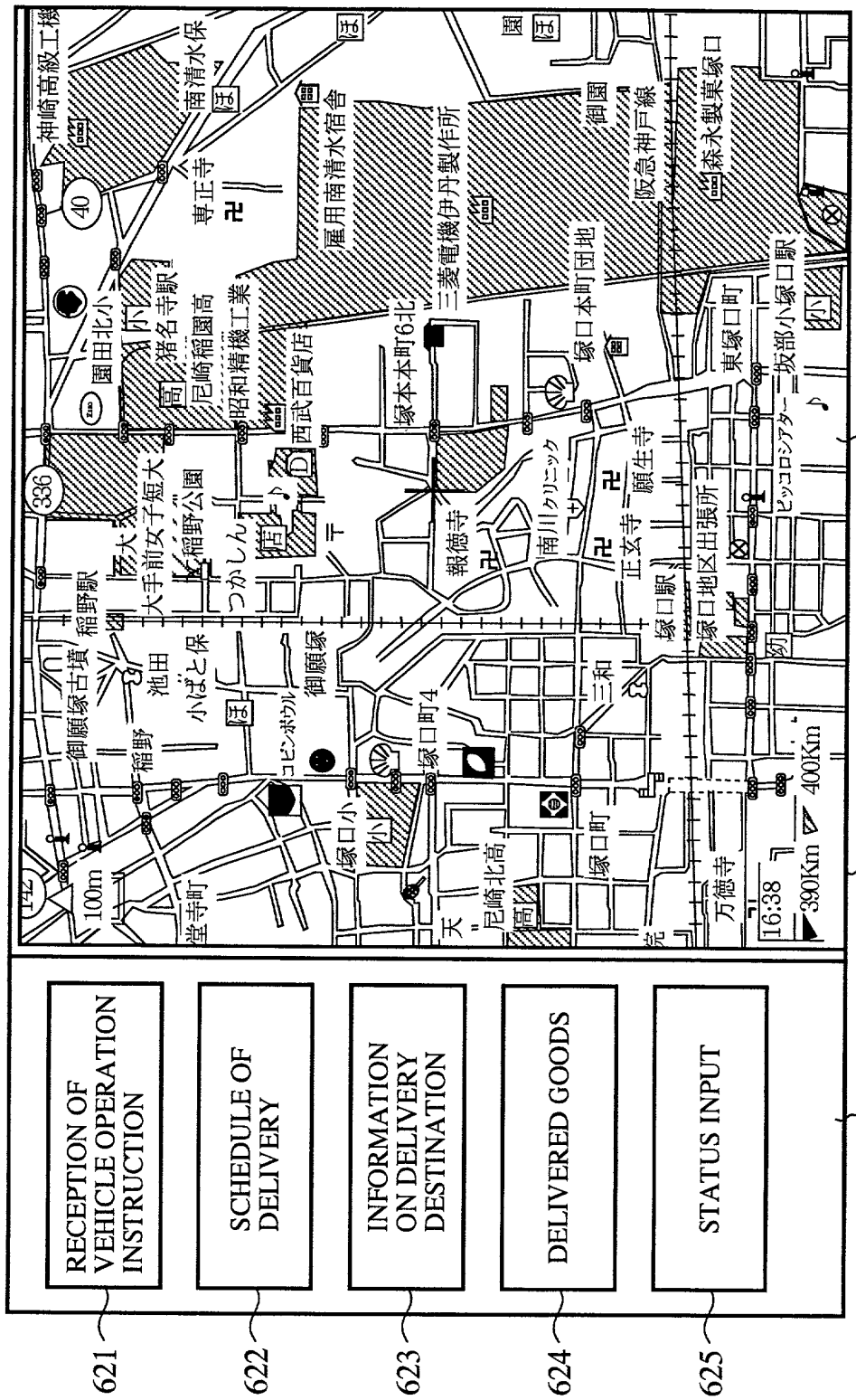
(ORDER OF DELIVERY: 04, STORE CODE: A0056, STORE NAME: CONVENIENCE STORE D)

(NAME OF DELIVERED GOODS)	(QUANTITY)
○○ JUICE	7 CASES
×△ COLA	6 CASES
△△ WATER	14 CASES

(ORDER OF DELIVERY: 05, STORE CODE: K0239, STORE NAME: CONVENIENCE STORE E)

(NAME OF DELIVERED GOODS)	(QUANTITY)
○○ JUICE	7 CASES
×△ COLA	6 CASES
△△ WATER	14 CASES

FIG.23


RECEPTION OF VEHICLE OPERATION INSTRUCTION
SCHEDULE OF DELIVERY
INFORMATION ON DELIVERY DESTINATION
DELIVERED GOODS
STATUS INPUT
621
622
623
624
625
601
602
8
神崎高級工機
園田北小
猪名寺駅
専正寺
南清水保
尼崎稲園高
昭和精機工業
雇用南清水宿舎
西武百貨店
塚本本町6北
三菱電機伊丹製作所
塚本本町団地
御園
阪急神戸線
森永製菓塚口
東塚口町
塚口駅
正玄寺
願生寺
南川クリニック
報徳寺
塚口地区出張所
ヒッコシアター
坂部小塚口駅
御願塚古墳
稲野駅
池田
小ばと保
大手前女子短大
稲野公園
つかしん
御願塚
コピンボウル
塚口小
塚口町4
三和
塚口町
尼崎北高
万徳寺
堂寺町
100m
16:38
390Km
400Km